

AMENDMENTS TO THE CLAIMS

Claim 1. (Currently amended) An electron emitter comprising a carbon nanotube particulate on a surface wherein the carbon nanotube particulate comprises entangled small-diameter carbon nanotubes arranged in a three-dimensional network wherein the small-diameter nanotubes have an outer diameter in a range of about 0.5 nm and about 3 nm, wherein the carbon nanotube particulate has a cross-sectional dimension in a range of about 0.1 micron and about 100 microns.

Claim 2. (Original) The electron emitter of claim 1 wherein the particulate has a cross-section dimension in the range of about 0.1 micron and about 3 microns.

Claim 3. (Original) The electron emitter of claim 1 wherein the carbon nanotubes are selected from the group consisting of single-walled carbon nanotubes, double-walled carbon nanotubes, triple-walled carbon nanotubes, quadruple-walled carbon nanotubes and combinations thereof.

Claim 4. (Original) The electron emitter of claim 1 wherein the carbon nanotube particulate comprises ropes of carbon nanotubes.

Claim 5. (Original) The electron emitter of claim 4 wherein the ropes have a cross-sectional dimension in a range of about 10 nm and about 50 nm.

Claim 6. (Original) The electron emitter of claim 4 wherein the ropes have a cross-sectional dimension less than 10 nm.

Claim 7. (Original) The electron emitter of claim 4 wherein the carbon nanotube particulates comprise small-diameter carbon nanotubes having more than about 10 small-diameter carbon nanotubes/ μm^2 surface area of the carbon nanotube particulates.

Claim 8. (Original) The electron emitter of claim 4 wherein the carbon nanotube particulate on the surface has been activated by etching.

Claim 9. (Original) The electron emitter of claim 4 wherein the electron emitter is a component in a cathode of a field emission device.

Claim 10. (Currently amended) The electron emitter of claim ~~40~~ 9 wherein the field emission device is selected from the group consisting of electron tubes, amplifiers, oscillators, mixers, microwave components, discharge initiators, laser tubes, spark gaps, controlled discharge tubes, directed energy devices, display tubes, flat-panel displays and combinations thereof.

Claims 11.-23.(Cancelled)